GUISBOROUGH RURAL DISTRICT COUNCIL.

COMBINED DISTRICT COUNCILS

GUISBOROUGH UNION.

REPORT

FOR THE YEAR 1913

OF THE

MEDICAL OFFICER OF HEALTH,

W. W. STAINTHORPE, M.D. C.M.. D.P.H.

STOKELD, PRINTERS, GUISBRO'.

To the Chairman and Members of the Guisborough Rural Council.

GENTLEMEN,

I have pleasure in submitting for your consideration my Report for the year ending December 31st, 1913.

Physical Features.

Varied ;—hills, wooded and bare,—dales,—moors, and a stretch of flat land between the Cleveland Hills and the sea. The only river flowing through the district is the Esk which empties into the sea at Whitby. This river receives the effluent from the sewage tank at Castleton. A small stream of water near Dunsdale receives the slop-water of that village.

Population, &c.

Industries:—ironstone mining and agriculture:—about 50% of the population are dependent upon the former and 40% on the latter. The public health is not influenced in any way by any particular occupation.

Birth and Mortality Statistics.

Population at middle of 1913 (estimated)	...	7,860.
Births (corrected)	...	190 (90 males, 100 females).
Birth rate ...	...	24·17.
Deaths (corrected)	...	124 (59 males, 65 females).
Death rate ...	...	15·77.
Infant mortality rate (per 1000 births)		89·4.
Infectious diseases death rate (tuberculosis excluded)		1·14.
Tuberculosis death rate	...	1·14.
Diarrhœal diseases death rate		Nil.

Inspections.

Nuisances ascertained to exist during visits made by the Inspector are either reported by entry in his journal, or the particulars are forwarded to the owner or agent of the property, or to me. Those which come under my own observation are either reported direct to the Council or particulars are forwarded to the Inspector for entry in his journal, or are communicated to the owner or his agent. The Inspector's journal and my report are placed before the Council at each of its monthly meetings. The several items in the journal and the report are considered and instructions are given for the serving of the necessary notices. In most cases an informal notice is issued, if not complied with the matter is reported to the Council.

Inspections were made by myself and Mr. Woodcock in the several villages in the district; many special visits were also made, chiefly for the purpose of making enquiries concerning cases of infectious diesase notified.

Number of Inspections under Housing Acts	283
Ditto under Factory and Workshop Act	118
Ditto under Dairies and Cowsheds Order	112
Ditto of slaughterhouses	20
Number of other inspections	85
Number of visits under Notification Act	59
Number of notices sent to Teachers (re infectious cases) ...	85
Number of premises disinfected	88
Number of informal notices served	87
Number of statutory notices served	4
Number of notices complied with	71
Number of outstanding notices	20

TABLE A

giving particulars of the water supply, drainage, &c., in each of the several centres of the population in district.

Parish or Township.	Place.	Geological Strata.	Class of Population.	Water Supply.	Drainage.	Table of Sanitary Conveniences.	Scavenging.
Danby Parish. Population 1164.	Danby End	Oolite over upper lias	Agricultural and Artisan	Public Supply and Springs	Not sewered	Pails and ordinary closets with pits	Contracted for by District Council.
	Castleton	ditto	Do	Public Supply	To settling tank, thence to stream	37 pails 24 ordinary closets with pits	Do.
	Ainthorpe	Oolite	Do.	Public Supply and Springs	Not sewered	Pails and a few ordinary closets with pits	Do.
Easington Parish. Population 853.	Easington	Oolite,—upper lias	Agricultural and Iron-stone Mining	Spring to fountain	To ditch	16 pails 4 ordinary closets with pits	Do.
	Cowher	Upper lias,—middle lias	Iron-stone Mining	Public Supply (from Hinderwell)	To sea	Ordinary closets and pits	Contracted for by owner of the cottages.
	Boulby	Oolite,—lias	Do.	Spring to small reservoir, thence to stand-pipes.	To stream	Pails	Do.
Kirkleatham Parish. Population 632.	Kirkleatham	Lower lias	Agricultural	Cleveland Water Company	To ditch	10 pails 13 ordinary closets with pits	Contracted for by District Council.
	Dunsdale	Middle Lias	Iron-stone Mining	Wells and Spring	To stream	23 pails and 34 ordinary closets with pits	Do.
	Yearby	Lower lias	Agricultural	Well	To ditch	13 pails 16 ordinary closets with pits	Do.
Marske Parish. Population 2965.	Marske	Lower lias	Mixed	By Cleveland Water Company	To sea	273 pails. 65 water closets 29 ordinary closets with pits	Do.
	New Marske	ditto	Iron-stone Mining	Do.	Do.	Pails	Do.
Upleatham Parish. Population 146.	Upleatham	Upper lias	Agricultural	Spring to fountain	To ditch	15 pails 8 ordinary closets with pits	By occupiers.

TABLE A—continued.

Parish or Township.	Place.	Geological Strata.	Class of Population.	Water Supply.	Drainage.	Table of Sanitary Conveniences.	Scavenging.
Wilton Parish. Population 1092.	Wilton	Lower lias	Agricultural	By Stockton and Middlesbro' Water Board	To ditch	Earth closets	Contracted for by District Council.
	Lazenby	Lower lias	Mixed	Do. and wells	Settling tank, thence to ditch	106 pails	Do.
	Lackenby	Lower lias	Iron-stone Mining	Stockton and Middlesbro' Water Board	To ditch	All pails	Do.
	North Lackenby	Lower lias	Blast Furnace Workers	Do.	To small stream	Do.	Do.
Westerdale Parish. Population 238.	Westerdale	Middle lias	Agricultural	Spring	Not sewered	Pails and ordinary closets with pits	By occupiers.
Newton Parish. Population 129.	Newton	Lower lias	Agricultural	Public Supply	To settling tank, thence to ditch	13. pails. 3 ordinary closets with pits. 3 water closets	Do.
Commondale Township Population 189.	Commondale	Oolite	Engaged in making sanitary pipes, &c.	Springs	To cesspool	Pails and ordinary closets with pits	Contracted for by District Council.
Hutton Lowcross Township. Population 191.	Hutton	Lower lias	Agricultural	Reservoir (private), thence to houses	On to land	Water-closets	By occupiers.
Pinchingthorpe. Population 65.		Lower lias	Railway Employees	Well-pump	To ditch	Pail closets	Do.
Morton. Population 78.		Lower lias	Agricultural	From Private Reservoir	No sewer scattered houses	Do.	Do.
Upsall. Population 71.		Lower lias	Iron-stone Mining	Do.	To ditch	Do.	Do.

Sewerage.

At Marske a sewer has been constructed to carry the sewage from a few houses into the main sewer,—previously a nuisance was caused by the discharge of this sewer on to land near the shore.

Water Supplies.

The supply to one cottage has been improved. Steps are being taken to improve the supply to two farms.

Hitherto no action has been taken to ascertain whether or not any water (at present used) acted on lead ; it is proposed to make such tests and examinations as will enable this information to be obtained. A proposal was made to convey water from a spring to supply the village of Westerdale, the cost to be defrayed by the persons interested. The water from this spring was found to have a marked action on lead as was that from a second spring; in consequence the proposal fell through.

Cowsheds and Dairies.

The Register contains the names and addresses of sixty cowkeepers and five dairymen. The inspections of cowsheds and dairies numbered ninety-eight. The usual bi-yearly notices to limewash were served. One informal notice to remedy a defect was served and complied with.

Food Inspection.

The premises on which foods are prepared or stored for sale are :—dairies, slaughter-houses, and bakehouses. The first two named are inspected under the Regulations applying thereto,—the last named under the Factory and Workshop Act. Of the eight licensed slaughter-houses three are in Castleton, two at Marske, two at New Marske, one at Lazenby. Frequent inspections were made. Carcases hanging in the slaughterhouses and in shops were examined:—no carcase was found in a diseased state.

Elementary Schools :—particulars of.

School.	Is Water on Premises ?	Sanitary Conveniences.	Yard Pervious or Impervious.
Castleton ...	On premises ...	Ordinary with pits	Pervious
Commondale ...	ditto ...	Pails ...	Pervious
Danby End ...	ditto ...	ditto ...	Pervious
Dunsdale ...	Supply in vessel on premises	ditto ...	Impervious.
Easington ...	No supply on premises	Ordinary with pits	Pervious
Fryup ...	ditto ...	Pails ...	Pervious
Hutton ...	On premises ...	Water-closets ...	Impervious.
Marske { Mixed ...	ditto	ditto ...	Pervious
Marske { Infant ...	ditto	Pails ...	Pervious
New Marske ...	ditto	ditto ...	Impervious
Lazenby ...	No supply on premises	Earth closets ...	Pervious
Scaling ...	ditto	Pails ...	Pervious
Westerdale ...	ditto ...	Ordinary ...	Pervious
Wilton ...	On premises ...	Earth Closets ...	Pervious
Upleatham ...	No supply on premises	Ordinary ...	Pervious
Yearby ...	On premises ...	Pails ...	Impervious

It will be noted that of the sixteen schools named twelve have playgrounds the surface of which is pervious. Rain renders these yards muddy, dry weather makes them dusty. In the winter months much mud is conveyed on to the floors of the school-rooms by the pupils' shoes. It is very desirable that all playgrounds be covered with impervious material. At the Infant school, Marske, the pail closets should be replaced by water-closets.

Housing, Town Planning, &c., Act, 1909.

Number of dwelling-houses inspected under the Housing, Town Planning &c., Act, 1909	127
Number of dwelling-houses considered unfit for habitation	nil
Number of representations made with a view to making closing orders ...	nil
Number of closing orders made	nil
Number of dwelling-houses in which the defects were remedied without the making of closing orders	nil
Number of dwelling-houses made fit after making of closing orders ...	nil

Condition of houses inspected as to

Lighting.		Air Circulation.		Cleanliness.		
Good ...	121	Good ...	127	Clean ...	109	
Fair ...	6	Fair ...	0	Fair ...	7	See Note.
Bad ...	0	Bad ...	0	Not clean ...	6	
				Dirty ...	5	

Note.—The word "Fair" is used when the conditions are such as to leave room for improvement: "Not clean" where the room for improvement is considerable: "Dirty" where it is desirable to give notice under Section 46 of the Public Health Act, 1875.

Particulars of defects found (in a large number of cases of a minor character):—

House yards in defective condition	17
Sanitary conveniences ditto	16
Damp or defective walls	1
ditto ditto floors	16
ditto ditto pantries	7
Defective windows	33
ditto roofs	9
Other defective or insanitary conditions	33

The number of houses inspected in the several parishes is as follows:—

Easington parish ...	37.	Wilton parish ...	20.
Marske parish ...	33.	Danby parish ...	12.
Kirkleatham parish ...	15.	Pinchinthorpe ...	10.

House Accommodation.

There is no indication that an increase in the number of houses is required in any part of the district. There are however indications that increased bedroom accommodation is necessary in some houses.

Infectious Diseases (Notification) Act.

Cases of Infectious Diseases notified during the year 1913.

Disease.	Number of Cases Notified.								Total Cases Notified in each Locality in the District.						
	At all Ages.	At Ages.—Years.							Marske.	New Marske.	Danby Parish.	Kirkleatham Parish.	Easington Parish.	Wilton Parish.	Other Places.
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 45.	45 to 65.	65 and upwards.							
Diphtheria (including Membranous croup) ...	11		3	7	1				4	1			3	3	
Erysipelas	1							1	1						
Scarlet Fever	133	2	34	80	11	6			24	82			22	5	
Pulmonary Tuberculosis ...	11			1	5	5			1	2	2	2	1	3	
Other forms of Tuberculosis ...	6		1	3		2			2	1				1	2
Totals	162	2	38	91	17	13		1	32	86	2	2	26	12	2

No case of any of the following diseases was notified :—

small-pox, typhus fever, enteric fever, puerperal fever, poliomyelitis, cerebro-spinal meningitis.

Infectious Diseases Notification Act (continued).

There are certain factors influencing the spread of the infectious diseases of childhood which require fuller appreciation than is accorded them at present. Given two districts or two parts of a district, A and B. Let the child population in A be greater proportionately than in B, then in A the number of cases will, other things being equal, be larger than in B. Let there also be in A the existence of some condition (not present in B) which favours the spread of the disease, such as the aggregation of a large number of houses of one type the occupants of which intermix freely with their neighbours, then the greater prevalence of the disease in A can be readily understood and does not require for its explanation the assumption that it results from some local insanitary condition. It is very important that the public should understand the conditions which lead to the dissemination of infectious diseases. Anything which fosters the belief that this is due to defects in sanitary arrangements induces carelessness. It is natural that it should be argued that if such defects are the cause, it is useless to take the usual precautions as to isolation, &c.

Scarlet Fever.

Number of cases notified	...	133 (65 males, 68 females).
Number of deaths ...	...	8.
Case rate mortality ...	...	6·01.

Of the 133 cases reported 106 (80 per cent.) occurred in the parish of Marske of which 82 were in New Marske, 24 in Marske. Of the remainder 22 occurred in the parish of Easington. During the first quarter of the year fourteen were notified, in the second forty-one. in the third fifty-six, during the last quarter twenty-two. On June 18th the elementary school at New Marske was closed for one month. During that period seventeen cases in New Marske were reported of which twelve occurred during the last three weeks. The spread of the fever was no doubt due to lack of accommodation for the efficient isolation of the patients but much of it could have been avoided if steps had been taken to prevent the infected coming in contact with the healthy. All the houses at New Marske are occupied by persons engaged in the mining of iron-stone and the work connected therewith :—in none of them is effective isolation possible. No milk supply was implicated. Many of the infected houses were visited by me. The names and addresses of infected families were forwarded to the Head Teacher of the schools ; after disinfection had been carried out notice that this had been done was also sent to the Teachers.

Diphtheria.

It does not follow when the specific bacilli of diphtheria invade a body that the disease will manifest itself (if ever it does so) after the ordinary incubation period. Diphtheria is first a local disease then a general. If the local conditions, that is the state of the mucous membrane of the mouth, throat, nose, &c., are unfavourable to the growth of the bacilli at the time of invasion they fail to produce the disease. But the bacilli may remain in contact with the membrane for a considerable time ready to take effect should the conditions change in such a way as to favour their growth and the production and absorption of the poison which renders the disease general.

Number of cases notified	...	11.
Number of deaths ...	...	1.
Case rate mortality ...	...	9 per cent.

Of the eleven cases notified four occurred in three houses in Marske, one at New Marske, three in separate houses in Easington parish (one of which was imported), three in one house in the parish of Wilton. To assist in the diagnosis of cases ten 'swabs' were submitted for bacteriological examination, of these six gave a positive result, four a negative.

Measles.

No death from measles was recorded during the year.

Much difference of opinion exists as to whether or not children living in a house infected with measles should be permitted to attend school. In his Supplement to the Annual Report of the Local Government Board for the year 1912—1913 Dr. Newsholme (the Chief Medical Officer of that Board) says " Not infrequently objection is raised to the attendance at school of children " who have had measles and are over the age of attendance in infant schools, who come from " households in which there is a case of measles. Such attendance under the common conditions " of town life is justifiable, so long as it remains true that most of the children above the infant " classes have already had measles. All clinical evidence points to the conclusion that measles " is infectious chiefly by direct conveyance from the patient, and that its conveyance by fomites " (clothing, etc.), is negligible."

Enteric Fever.

The total number of cases of enteric fever notified in the whole of the districts in the Union was four. Three of these occurred in the Redcar district, the fourth in the Skelton and Brotton. One of the three in Redcar apparently was contracted from one of the other two in that district. The source of infection of the others I was unable to trace definitely:—one was possibly due to infected shell-fish, one probably contracted out of the district.

Tuberculosis.

The following Table shows the number of cases, &c., notified in the several districts.

District.	Pulmonary.	Other Forms	Total.	Males.	Females.	Rate per 1000 of the population.
Guisborough Rural ...	11	6	17	7	10	2·16
Guisborough Urban ...	12	8	20	10	10	2·81
Loftus Urban ...	11	4	15	11	4	1·61
Redcar Urban ...	18	10	28	15	13	2·43
Saltburn Urban ...	2	4	6	2	4	1·71
Skelton & Brotton Urban	15	20	35	24	11	2·18
Totals, &c. ...	69	52	121	69	52	2·18

The Public Health (Tuberculosis) Regulations, 1912, which came into force February 1st, 1913, require the notification of cases of tuberculosis of all forms. The medical officer of health or an officer of the Local Authority acting under the instructions of the medical officer of health is required to make enquiries and take such steps as are necessary or desirable for investigating the source of infection, for preventing the spread of infection and for removing the conditions favourable to infection. The Local Government Board suggest that the Tuberculosis Officer should undertake the duties, or some of them, of the medical officer of health. As no such officer has as yet been appointed I have had no assistance in carrying out the duties.

For the better appreciation of the difficulty met with in endeavouring to trace the source of infection it is desirable to make a short statement of what is known as to the cause of tuberculosis and of the means by which it is disseminated. The disease is due to the invasion of the body, generally by inhalation or ingestion, of the specific bacilli. The time the symptoms manifest themselves bears no relation to the time of invasion. It is probable that in some instances the invasion is accompanied by symptoms of an indefinite character. In one individual the bacilli may be overcome and destroyed, in another they may be imprisoned in some organ or tissue of the body remaining there in a dormant state ready to resume activity if by any means they are liberated. It will thus be understood that the true source of infection may be difficult to trace.

The sputum of a patient suffering from pulmonary tuberculosis contains the specific bacilli :—infection may be contracted therefrom by the inhalation or ingestion of fine particles of the dried sputum The disease may be contracted by the use of tuberculous milk or meat :—the information at present possessed renders it impossible to say to what extent the one or the other is responsible.

Of the 121 houses in which tuberculosis was notified to exist 105 were visited by me, to 29 subsequent visits were paid. In by far the larger number of cases it was impossible to arrive at any conclusion as to the source of infection.

In each of thirteen instances it was ascertained that the disease had been contracted before the patient had come into the district In each of five cases it is probable that the infection proceeded from a previous case in the house. Two patients, a soldier and an ex-soldier, apparently became infected whilst serving in the Army. Four either contracted the disease whilst resident in asylums or it was latent in them at the time of admission.

Predisposing Causes. Post-mortem examinations show that very many persons who have died from diseases other than tuberculosis have at one time or another been invaded by the tubercle bacilli :—the many are invaded, the few (comparatively) become the prey ;—the many overcome the foe, the few are unable to do so. The inability to overcome appears in some instances to be inherited, in others it results from living under conditions inimical to health generally. It is assumed therefore that whatever promotes the attainment of 'the sound mind in the sound body' increases resisting power. Soundness of mind, using that term in its broadest sense, is an important factor, a factor which is not sufficiently appreciated. There is little doubt that grief and worry lower the vital power considerably, probably to a greater extent even than unhealthy environment.

In one third of the cases enquired into it was ascertained that one or other near relative was suffering from or had succumbed to consumption. Could precise information on the point have been obtained there is little doubt that this proportion would have been found larger. The cause of death of a relative is not always known especially if that relative has died during the childhood of the patient whose case is under enquiry. Nor is it to be overlooked that whilst death from pulmonary tuberculosis (consumption) may be known to members of the family, death from some other form of the disease is not so likely to be

Of the predisposing causes the chief are :—

Deficient nutrition resulting from unsuitable or improperly cooked food or its insufficiency.
Inefficient bedroom ventilation.
Inadequate or excessive clothing.
Neglect of minor ailments
Prolonged physical or mental strain.
Bad home conditions causing neglect of children.
Alcoholic or other excesses.
Anxiety or grief.
Unhealthy environment.

Of the 105 houses visited by me it was found that in 72 the environment was good, in 32 it was fair, in one bad :—in 62 the home conditions were good, in 28 they were fair, in 15 bad. In the 15 mentioned there were signs of general neglect. There was no indication that the disease unduly affected persons following any particular employment. Of the male adult patients ten were miners, five labourers, three clerks, three engineers, two masons, two draughtsmen :—the employment of the remainder varied. Of the female adults four were or had been in domestic service,—twenty-three were 'housewives.' Two members of one family were attacked the disease manifesting itself in each at such time as precluded any probability that the one contracted it from the other, moreover they resided in different districts and had not, previous to being attacked seen each other for some time. Many years ago this family came under my observation owing to the very bad home conditions which existed, conditions which undoubtedly contributed very materially to the members mentioned becoming a prey to the disease.

Action Taken.— Such advice was given in each case as the circumstances called for. Cuspidors and cards of instructions were supplied where needed. Where insanitary conditions existed (in very few instances were such found) steps were taken to have them remedied. In such cases as appeared desirable the names and addresses of school children living in the houses were forwarded to the Medical Inspector of school children in order that they might receive special attention. Bedrooms occupied by those suffering from tuberculosis were disinfected after the death or removal of the patient. In a few instances it was found either unnecessary or undesirable for various reasons to take any action.

Of the persons notified to be suffering from tuberculosis forty-two were insured (under the National Insurance Act) and forty-seven were the dependents of insured. Fourteen of the insured received Sanatorium treatment, one Domiciliary treatment. Of the fourteen mentioned four were discharged after periods varying from seventeen days to ten weeks :—these four died soon after discharge. Three improved after eight weeks treatment and are now following their usual employment. Two on discharge left the district,—their condition is unknown. The condition of two remains the same. One subsequently was admitted to another sanatorium,—one is at present very ill,—one is still in the sanatorium.

The number of deaths resulting from tuberculosis in the several districts was as follows :—

	Pulmonary.	Other forms.	Total.
Guisborough Rural ...	8	1	9
Guisborough Urban ...	8	4	12
Loftus Urban	3	2	5
Redcar Urban	10	7	17
Saltburn Urban	2	1	3
Skelton & Brotton Urban ...	8	7	15

There are certain desiderata in the treatment and prevention of tuberculosis (and these cannot be divorced) which require very careful consideration,—these are :—

(1) The exercise of the greatest possible care in the selection of cases sent to sanatoria; unless this be done this one form of treatment will fall into disrepute.

(2) The provision of a hospital for those in a hopeless condition whose return home would be a menace to the health of the family.

(3) The provision of some arrangement for the after-care of patients discharged from sanatoria.

Factory and Workshop Act.

There are 49 Workshops and 9 Factories on the Register,—as follows :—

Workshops :—		Factories :—	
Carpenters	12	Carpenter	1
Shoemakers	10	Tile-works	1
Blacksmiths	11	Sawmill	1
Dressmakers	6	Gannister Quarry	1
Tailors	4	Whinstone do.	1
Saddler	1	Blast Furnace	1
Bakers	4	Slag-brick works	2
Fish-frying	1	Slag-wool do.	1
	49		9

There are no ' Outworkers ' on the Register.

The inspection of factories and workshops numbered 118. Two notices to limewash premises were served and complied with.

Table of Birth and Mortality Rates in the several Districts in the Union.

DISTRICT.	Population estimated to middle of year 1913.	Births :— Uncorrected number.	Births :— Corrected number.	Birth Rate.	Deaths registered in District.	Death Rate.	Deaths of Non-residents registered in the District.	Deaths of Residents not registered in the District.	Deaths of Infants (under 1 year of age).	Infant Mortality Rate.	Total number of Deaths at all ages.	Death Rate.	Infectious Diseases Death Rate (excluding tuberculosis).	Tuberculosis Death Rate.	Diarrhœal Diseases Death Rate.
Guisborough Rural ...	7860	190	190	24·17	119	15·13	2	7	17	89 4	124	15·77	1·14	1·14	Nil
Guisborough Urban ...	7100	214	211	29·71	114	16 05	16	3	22	109 0	101	14·22	1·25	1 69	0·14
Loftus Urban ..	9300	279	279	30·00	121	13 01	0	9	37	132 6	130	13·97	1·62	0·54	0·9
Redcar Urban ...	11500	256	258	22·46	142	12·34	6	13	28	108 5	149	12 95	1·04	1·21	0·52
Saltburn Urban ...	3500	53	53	15·08	36	10·28	4	7	5	94·4	39	11 14	0·86	0·86	Nil
Skelton & Brotton Urban ...	16000	463	465	29 06	186	11 62	1	12	58	124·7	197	12·31	0·56	0·93	0·62
Totals and Averages ..	55260	1455	1456	26·34	718	12·99	29	51	167	114·6	740	13·39	1·04	1·10	0·47

Table III.

Causes of, and Ages at Death during the year 1913.

CAUSES OF DEATH.	Nett Deaths at the subjoined ages of "Residents" whether occurring within or without the District.								
	All ages.	Under 1 year.	1 and under 2 years	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	65 and upwards.
1	2	3	4	5	6	7	8	9	10
All causes — Certified	113	16	1	10	6	3	10	25	42
All causes — Uncertified	11	1		1			1	1	7
1. Enteric Fever									
2. Small Pox									
3. Measles									
4. Scarlet Fever	8	1		3	3	1			
5. Whooping Cough									
6. Diphtheria and Croup ...	1			1					
7. Influenza	3							1	2
8. Erysipelas									
9. Phthisis (Pulmonary Tuberculosis)	8				1	1	4		2
10 Tuberculous Meningitis ...									
11. Other Tuberculous Diseases ...	1			1					
12. Cancer, malignant disease ...	12						1	6	5
13. Rheumatic Fever ...									
14. Meningitis	2			1	1				
15. Organic Heart Disease ...	6					1		3	2
16. Bronchitis	11	3		1				1	6
17. Pneumonia (all forms) ...	9	1	1	3			1	1	2
18. Other diseases of respiratory organs ...	1							1	
19. Diarrhœa and Enteritis ...									
20. Appendicitis and Typhlitis ...									
21. Cirrhosis of Liver	2							2	
21a. Alcoholism									
22 Nephritis and Bright's Disease ...	1							1	
23. Puerperal Fever									
24. Other accidents and diseases of Pregnancy and Parturition ...	2						2		
25. Congenital Debility and Malformation, including Premature Birth	10	10							
26. Violent Deaths, excluding Suicide	1						1		
27. Suicide									
28. Other Defined Diseases ...	43	2		1	1		1	9	29
29. Diseases ill-defined or unknown	3						1	1	1
	124	17	1	11	6	3	11	26	19

Infant Mortality.

Over twenty-two per cent. of the deaths in the Guisborough Union during the year occurred among infants (under one year of age). There is no doubt that a very large proportion of these had an ante-natal cause, that is, they resulted directly from the unhealthy condition of one or both parents. The large number of deaths certified to be due to premature birth, marasmus, inanition, convulsions, &c., indicates this. A reduction in the number of such deaths cannot be expected until individuals recognise that as they are so their children will be and recognising this will lead healthy lives.

It is a matter for congratulation that Education Authorities have at last realised the necessity of teaching cooking and house-work. Much of the unhealthy condition existing proceeds from lack of nourishment, not from lack of means to obtain that nourishment but of lack of knowledge of the feeding value of the various foods and of the best means of so cooking foods as to render them digestible. This teaching requires to be carried further, general hygiene should be taught practically.

Future Action.

(1) The provision of accommodation for the isolation of cases of infectious diseases. On August 26th a petition signed by ratepayers in the parish of Marske was forwarded to the County Council asking that body to hold a local enquiry under the Isolation Hospitals Act, 1893. This was referred to a Committee. On January 28th 1914, a reply was received stating that several Urban and Rural Councils in the Riding were being communicated with on the subject of isolation hospital accommodation and that until the replies were received the Committee deferred reporting on the Petition. Why a local enquiry should be postponed until it is ascertained what is being done in the matter in the whole of the Riding passes comprehension.

(2) The construction of a sewer at Ainthorpe and Danby End. Both these places, which adjoin, are much frequented by visitors in summer and would be to a greater extent if accommodation permitted.

(3) The adoption of Byelaws with respect to Tents, Vans, Sheds, &c. It is hoped that the Council will arrive at some decision on this question at an early date.

This part of the report would not be complete without a reference to remarks made in previous years as to the necessity of *individual* action, remarks no less needed now than then. Inspections and special visits made show that in many houses the most elementary laws of health are unfulfilled,—domestic and personal cleanliness being neglected, ventilation of bedrooms more honoured in the breach than the observance, sunlight excluded by drawn blinds, &c. In too many instances little attempt is made to maintain conveniences in a cleanly condition, lime-washing of the walls of these is very rarely done. Reform of the conditions under the control of the individual is as requisite as that depending on the action of the local authority.

There is a concensus of opinion that a connection exists between the occurrence of tuberculosis and defective housing. Improve housing by all means, but unless such improvement be accompanied by reform *in* the house it will be of little avail.

Table IV.

Infant Mortality.

1913. Nett Deaths from stated causes at various Ages under 1 Year of Age.

Cause of Death.	Under 1 week.	1-2 weeks.	2-3 weeks.	3-4 weeks.	Total under 4 weeks.	4 weeks & under 3 months.	3 months & under 6 months.	6 months & under 9 months.	9 months & under 12 months.	Total Deaths under 1 year.
All causes {Certified. 16 / Uncertified. 1}										
Small-pox										
Chicken-pox										
Measles										
Scarlet fever									1	1
Whooping-Cough										
Diphtheria and Croup										
Erysipelas										
Tuberculous Meningitis										
Abdominal Tuberculosis										
Other Tuberculous Diseases										
Meningitis (not Tuberculous)									2	2
Convulsions										
Laryngitis										
Bronchitis							1	2		3
Pneumonia (all forms)									1	1
Diarrhœa										
Enteritis										
Gastritis										
Syphilis										
Rickets										
Suffocation, overlying										
Injury at birth										
Atelectasis										
Congenital Malformations								1		1
Premature birth	4		1							5
Atrophy, Debility and Marasmus	1	2				1				4
Other Causes										

Nett Births in the year { legitimate 173, illegitimate 17 } 190

Nett Deaths in the year of { legitimate infants 16, illegitimate infants 1 } 17

Saltburn,
March 28th, 1914.

I am, Gentlemen,
Yours obediently,
W. W. STAINTHORPE.

ADDENDUM.

Since this report was printed I have received from the Local Government Board a copy of a report on the Statistics of the Incidence of Infectious Diseases in England and Wales during the year 1913.

In an accompanying circular the Medical Officer says "It is hoped that you will utilise "these statistics in comparing your own with other districts similarly circumstanced in the same "county, and with other districts in other counties."

The factors influencing the prevalence of infectious diseases vary so much as to render it difficult to make a true comparison between one district and another. An urban district with its population massed together cannot be compared with one in which the population is scattered over a wide area. A town in which the inhabitants are mainly employed in some industry cannot be compared with one the inhabitants of which are chiefly of the commercial class. The proportion of children to adults may be much larger in one district than another; unless the proportion be known a true comparison cannot be made. One district differs from another as regards the importation of infection from without. A large number of the residents in Redcar travel to and from neighbouring towns daily, a number of children attend schools outside the district, a very large number of visitors (season and day) come into it during the summer: it is thus specially open to the importation of disease and therefore cannot be compared with any district where the conditions named do not prevail. As to scarlet fever and diphtheria no true comparison can be made unless the figures used are the average of a period of years. One district may have an epidemic one year with the result that the number of cases in the following years (4 or 5) is small. The next year another district may be subject to an epidemic.

Guisborough Rural district has the unenviable position of having the highest attack rate from scarlet fever of any rural district in the North Riding and only one *urban* district in the Riding is higher. Redcar has this unenviable position so far as regards diphtheria, it having the highest attack rate in the whole of the Riding.

The attack rate from enteric fever in the Administrative County (North Riding) was 0·19 per 1000,—in the Guisborough Union it was 0·06.

W. W. STAINTHORPE.